UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,907	10/21/2005	Gerd Hoffman	08215-580US1	5392
26171 FISH & RICHA	7590 04/12/2007 ARDSON P.C		EXAMINER	
P.O. BOX 1022			FIGUEROA, FELIX O	
MINNEAPOLI	S, MN 55440-1022		ART UNIT PAPER NUMBER 2833	
		**		
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MOI	NTHS	04/12/2007	PAF	PER

# Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

			W
	Application No.	Applicant(s)	
	10/518,907	HOFFMAN ET AL.	
Office Action Summary	Examiner	Art Unit	
	Felix O. Figueroa	2833	
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet	with the correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING E  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUN 136(a). In no event, however, may will apply and will expire SIX (6) Mile, cause the application to become	IICATION. a reply be timely filed  DNTHS from the mailing date of this communication.  ABANDONED (35 U.S.C. § 133).	
Status	•		
1)⊠ Responsive to communication(s) filed on 22 F	ebruary 2007.		
2a) This action is <b>FINAL</b> . 2b) ⊠ Thi	s action is non-final.		
3) Since this application is in condition for allowa	ance except for formal ma	atters, prosecution as to the merits is	
closed in accordance with the practice under	Ex parte Quayle, 1935 C	.D. 11, 453 O.G. 213.	
Disposition of Claims			
4)⊠ Claim(s) <u>1 and 25-45</u> is/are pending in the ap	plication.		
4a) Of the above claim(s) is/are withdra	awn from consideration.		
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1 and 25-45</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/	or election requirement.		
Application Papers			
9) The specification is objected to by the Examin	er.		
10) The drawing(s) filed on is/are: a) ac	cepted or b)□ objected t	o by the Examiner.	
Applicant may not request that any objection to the	e drawing(s) be held in abey	ance. See 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the correct	ction is required if the drawi	ng(s) is objected to. See 37 CFR 1.121(d).	
11) ☐ The oath or declaration is objected to by the E	xaminer. Note the attach	ed Office Action or form PTO-152.	
Priority under 35 U.S.C. § 119			
<ul> <li>12) Acknowledgment is made of a claim for foreign</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority document</li> <li>2. Certified copies of the priority document</li> <li>3. Copies of the certified copies of the priority</li> </ul>	nts have been received. Its have been received in	Application No	
application from the International Burea	au (PCT Rule 17.2(a)).		
* See the attached detailed Office action for a lis	t of the certified copies no	ot received.	
Attachment(s)			
1) Notice of References Cited (PTO-892)		v Summary (PTO-413)	
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date		o(s)/Mail Date f Informal Patent Application	

#### **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 24, 2007 has been entered.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 25-40 and 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Embo (US 6,019,627) in view of Heng et al. (US 5,257,945).

Embo discloses a branching device for at least one electric line, the branching device comprising: a housing (3); and at least one electrically conducting wire terminal (9,4) that provides a branching contact, is accommodated in a holder (16) and includes contact lips, with cutting edges (at 11) for cutting through the insulation of the wire to be connected to the wire terminal; wherein: the at least one wire terminal further includes at least one connecting lug (4) which protrudes above the holder, a through-channel (between the two 13) for the uninterrupted passage of the wire; at least one of the

Art Unit: 2833

contact lips is flexible in a direction pointing away from the through-channel; and at least one holding-down clamp (bottom of 13 and 5) which holds the wires in the through-channel of the wire terminals and exhibits a transverse plate that closes off the through-channel and has an opening (not labeled) through which the connecting lug of the wire terminal protrudes.

Embo discloses substantially the claimed invention except for the contact lips being located diagonally to the through-channel. Heng teaches a terminal having contact lips located diagonally to the through-channel so that the tip of the edge of the contact lip protrudes into the through-channel (see Fig.4); at least one of the contact lips being flexible in a direction pointing away from the through-channel, thus preventing slipping of the wire when the wire is pulled/pushed. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the terminal of Embo, as taught by Heng, to prevent slipping of the wire when the wire is pulled/pushed.

Regarding claim 25, Heng discloses the wire terminal exhibiting a generally octagonal outline with two opposing longer sides, two shorter sides orthogonal to the longer sides, and diagonal sides situated between the longer and shorter sides, and wherein the at least one holder includes a corresponding octagonal locating space for accommodating the wire terminal.

Regarding claim 26, Heng discloses the contact lips being generally aligned with the diagonal sides of the wire terminal.

Regarding claim 27, Embo, as modified by Heng, discloses the through-channel running in a straight line through the wire terminal.

Regarding claim 28, Embo, as modified by Heng, discloses the wire terminal being accommodated releasably in the holder.

Regarding claim 29, Embo, as modified by Heng, discloses the device including a number of wire terminals corresponding to at least a number of wires to be branched.

Regarding claim 30, Embo, as modified by Heng, discloses the contact lips being provided in pairs in each case on a wire terminal.

Regarding claim 31, Embo, as modified by Heng, discloses the spacing between two paired contact lips is less than or equal to the diameter of a wire to be connected to the wire terminal.

Regarding claim 32, Embo, as modified by Heng, discloses the edges of paired contact lips facing the through-channel running parallel to one another at least in sections.

Regarding claim 33, Embo, as modified by Heng, discloses two paired contact lips together form an entry section for the wire, with a spacing between the contact lips widening towards an entry side of the through-channel.

Regarding claim 34, Embo, as modified by Heng, discloses a notch being provided between the wire terminal and its holder.

Regarding claim 35, Embo, as modified by Heng, discloses the holder of the wire terminals being attached releasably to the housing.

Application/Control Number: 10/518,907

Art Unit: 2833

Regarding claim 36, Embo, as modified by Heng, discloses multiple wire terminals and a common holder for all of the wire terminals.

Regarding claim 37, Embo, as modified by Heng, discloses a one common holding-down clamp for all wires.

Regarding claim 38, Embo, as modified by Heng, discloses the holding-down clamp representing a closure of the openings formed between the contact lips.

Regarding claim 39, Embo, as modified by Heng, discloses the holding-down clamp can be latched to the holder of the wire terminal.

Regarding claim 40, Embo, as modified by Heng, discloses the holding-down clamp can be latched to the housing.

Regarding claim 43, Embo, as modified by Heng, discloses the housing being assembled from a housing base section and a housing upper section.

Regarding claim 44, Embo, as modified by Heng, discloses the housing base section and the housing upper section can be screwed together (by 19,20).

Regarding claim 45, Embo, as modified by Heng, discloses a strain relief (24) being provided on the housing at the outlets for the lines.

Claims 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Embo and Heng, as applied to claim 1, and further in view of Toly (US 6,071,145).

Embo, as modified by Heng, discloses substantially the claimed invention except for the use of seals. Toly teaches the use of sealing rings (49) at the outlets of the line to protect the interior connections from dust and moisture. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made

Application/Control Number: 10/518,907

Art Unit: 2833

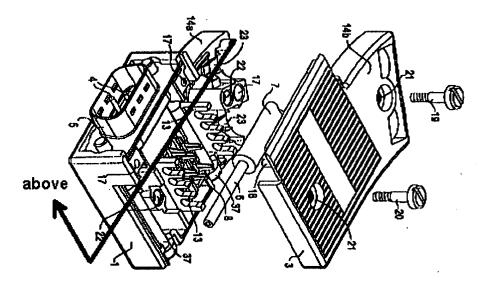
to use sealing rings on the outlets, as taught by Toly, to protect the interior connections from dust and moisture.

## Response to Arguments

Applicant's arguments filed 01/24/2007 have been fully considered but they are not persuasive.

In response to Applicant's argument that "element 5 [of Embo] is simply a plug body that holds conductors and plug contacts" and that "element 13 correspond to guides for controlling where the conductors come to rest", please note that elements 5 and 13 define a unit that forms a holding-down clamp with respect to the housing 3. Additionally, Embo discloses a transverse plate (not shown, underside of Figure 1) that closes of the through channel from the exterior.

In response to Applicant's argument that Embo does not disclose the plug contact protruding above the holder (16), please see the following figure.



Application/Control Number: 10/518,907 Page 7

Art Unit: 2833

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Felix O. Figueroa whose telephone number is (571) 272-2003. The examiner can normally be reached on Mon.-Fri., 10:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (571) 272-2800 Ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Felix O. Figueroa Primary Examiner Art Unit 2833